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Applicant: KAO Corporation

Title of Invention: Water-Based Manicure Cosmetic

Claim 1: A water-based manicure cosmetic comprising two or more of acrylic polymer emulsions wherein a difference between their glass transition temperatures is 10 degrees C or more.

Summary:

This invention provides a water-based manicure cosmetic having excellent adhesiveness, water-resistance, and abrasion resistance. The manicure cosmetic of the present invention is prepared by using 5 to 60% by weight of two kinds of acrylic polymer emulsions which comprise a high glass transition temperature-acrylic polymer emulsion and a low glass transition temperature-acrylic polymer emulsion. A difference of their glass transition temperatures is 10 degrees C or more.

Each of the high glass transition temperature-acrylic polymer emulsion and the low glass transition temperature-acrylic polymer emulsion is prepared by a polymerization or a copolymerization of acrylic or methacrylic monomers, and optionally, polymerisable vinyl monomers.

Working Example:

A aqueous enamel was prepared by using the following formulation: 90 parts of polymer emulsion A (Tg was 50 degrees C); 10 parts of polymer emulsion B (Tg was 10 degrees C); 3 parts of pigment (red pigment R-221); 10 parts of deionized water; 10 parts of Carbitol; 5 parts of diethyl phthalate; 0.5 parts of hydroxyethyl cellulose; 0.1 parts of perfume; 0.1 parts of antiseptic; and 0.1 parts of silicone type antifoaming agent. Polymer emulsion A was prepared by polymerizing 71.7 parts of methyl methacrylate, 20.1 parts of n-butyl acrylate, and 8.2 parts of N,N-dimethylaminoethyl methacrylate. Polymer emulsion B was prepared by polymerizing 49 parts of methyl methacrylate, 42.8 parts of n-butyl acrylate, and 8.2 parts of N,N-dimethylaminoethyl methacrylate.